

REMARKS

Consideration of this Preliminary Amendment is requested prior to the substantive examination of the above-captioned application.

The purpose of the foregoing Preliminary Amendment is two-fold.

First, in accordance with the Rules, Applicants have amended the specification to specifically reflect the fact that this application is a Division of United States Patent Application Serial No. 09/566,615, entitled OPTICAL RECORDING/REPRODUCTION APPARATUS, filed May 9, 2000 by I. Nakano, et al.

Second, Applicants, by the foregoing Amendment have canceled claims 1-9 (all of the claims in the originally filed parent application) and added new claims 10-13 (directed to an invention disclosed by the present specification, but not claimed in the parent application).

More particularly, the newly claimed invention of this divisional application does not have the object of reducing power consumption in the driving of the spherical-aberration correcting mechanism during the correction of spherical aberration as does the invention claimed in the parent application.

Instead, in the invention claimed in this divisional application the objective lens is designed so that the converged light spot at the mid-point between the first recording layer and the second recording layer of the optical storage medium has a minimum spherical aberration (see specification at page 33, line 18 to page 34, line 3). The two lenses constituting the spherical-aberration correcting mechanism are designed so that with the lens group gap between the first and second lenses equal to k_3 (dst(3)), the light rays having been transmitted through the two lens have a minimum spherical aberration (see specification, page 34, line 9 to page 35, line 3). Therefore, converging the light rays, with the lens group gap of the spherical-aberration correcting mechanism set to k_3 (dst(3)), to the mid-point between the first recording layer and the second recording layer using the objective lens (Figure 13) produces a minimum spherical aberration of the converged light at the mid-point. This effect is explicitly described in the specification at page 38, lines 3-13, wherein it is stated that the spherical aberration can be made minimum also when information is recorded/reproduced on a recording medium with a single recording layer having an optical thickness equivalent to the optical thickness at the mid-point previously discussed.

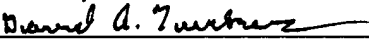
Another effect of the newly claimed invention is to make the amounts of spherical aberration of converged light spots on the first and second recording layers almost equal to each other (see the specification at page 35, lines 6-21).

Accordingly, Applicants respectfully submit that the invention claimed in claims 10-13 hereinabove is different from the invention claimed in the parent application, but nevertheless, fully supported by the specification as originally filed in the parent application. This divisional application, therefore, is respectfully submitted to be entirely appropriate and to otherwise comply with all of the formal requirements associated with its filing. Early consideration and allowance of the above-captioned divisional application in response to this communication consequently is respectfully requested.

Applicants also believe that additional fees beyond those submitted herewith are not required in connection with the consideration of this response to the currently outstanding Official Action. However, if for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge and/or credit Deposit Account No. **04-1105**, as necessary, for the correct payment of all fees which may be due in connection with the filing and consideration of this communication.

Respectfully submitted,

Date: September 30, 2003



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